



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|------------------------|------------------|
| 10/662,900 | 09/15/2003 | Cyril Cabral JR. | YOR920030218US1(16714) | 1278 |
| 23389 | 7590 | 06/01/2006 | EXAMINER | |
| SCULLY SCOTT MURPHY & PRESSER, PC 400 GARDEN CITY PLAZA SUITE 300 GARDEN CITY, NY 11530 | | | PHAM, LONG | |
| | | | ART UNIT | PAPER NUMBER |
| | | | | 2814 |

DATE MAILED: 06/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

W

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/662,900 | CABRAL ET AL. | |
| | Examiner | Art Unit | |
| | Long Pham | 2814 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on _____.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-17 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1 and 17 as currently amended and 2-16 as previously filed, are rejected under 35 U.S.C. 103(a) as being unpatentable over the applicant's admitted prior art (AAPA) of this application in combination with Maex et al. (US publication 2002/015170) and Van Kestersen et al. (US patent 5,952,094).

With respect to claims 1 and 17 as currently amended and 2-16 as previously filed, AAPA in combination with Maex et al. and Van Kestersen et al. teach the invention as claimed. **See the rejections of the office actions dated 08/22/05 and 01/03/06.**

Further with respect to claims 1 and 17 as currently amended, since AAPA in combination with Maex et al. and Van Kestersen et al. teach the claimed invention, an interface would inherently be formed between the disilicide and the SiGe-containing substrate and the interface would inherently be smoother than CoSi₂ interface without Ni presence.

Response to Arguments

Applicant's arguments filed 03/03/06 have been fully considered but they are not persuasive. See below.

In response to the applicant's arguments in the first full paragraph on page 7 of the amendment dated 03/03/06, it is submitted that the AAPA does not teach away from adding to Ni to Co layer.

In response to the applicant's arguments in the second full paragraph on page 7 of the amendment dated 03/03/06, it is submitted that the incorporation of Ni into Co layer as taught by Maex et al. would inherently reduce the formation temperature of CoSi₂.

In response to the applicant's arguments in the paragraph bridging pages 7 and 8 and the first full paragraph on page 8 of the amendment dated 03/03/6, it is submitted that Maex et al. is being relied on only for the broad teaching of adding Ni into Co layer to accelerate the formation of disilicide phase. Further, it is submitted that a prior art reference is evaluated by what it suggests to one versed in the art, rather than by its specific disclosure. *In re Bozek*, 163 USPQ 545 (CCPA 1969). Still further, it is submitted that a reference is considered not only for what it expressly states, but for what it would reasonably have suggested to one of ordinary skill in the art. *In re DeLisle*, 160 USPQ (CCPA 1969). In case, the effect of acceleration of disilicide phase would occur regardless of the material of the substrate.

In response to the applicant's arguments in the second full paragraph on page 8 of the amendment dated 03/03/6, it is submitted that Van Kesteren et al. is being relied on only for the broad teaching of adding RE to Co layer to reduce Curie temperature and magnetization. Further, it is submitted that a prior art reference is evaluated by what it suggests to one versed in the art, rather than by its specific disclosure. *In re Bozek*, 163 USPQ 545 (CCPA 1969). Still further, it is submitted that a reference is considered not only for what it expressly states, but for what it would reasonably have suggested to one of ordinary skill in the art. *In re DeLisle*, 160 USPQ (CCPA 1969). Still further, it is submitted that the fact that the applicants have a different reason or advantage resulting from doing what the relied prior art suggested doing is not indicative or demonstrative of unobviousness. *In Re Kronig* 190 USPQ 425,428 (CCPA 1976); *In Re Lintner* 173 USPQ 560 (CCPA 1972).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Long Pham whose telephone number is 571-272-1714. The examiner can normally be reached on Mon-Frid, 10am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wael Fahmy can be reached on 571-272-1705. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Long Pham
Primary Examiner

Art Unit 2814

LP